JSC honors inventors for outstanding work on behalf of center

Attending the annual JSC Inventors Luncheon are, from left, front: Gregory S. Aber, Jane T. Malin, George A. Salazar, and James W. Akkerman; back: Edward K. Fein, William C. Schneider, G. Dickey Arndt, Charles E. Verostko, Dennis R. Morrison, David A. Wolf and George W. S. Abbey.

Fifteen current and former JSC employees were honored recently at the annual JSC Inventors Luncheon at the Gilruth Center.

Patent counsel Ed Fein presented this year's awards. JSC Director George W.S. Abbey commended the honorees for their outstanding work on behalf of the center, the space program and the nation.

Those honored this year were Gregory S. Aber, James W. Akkerman and Richard J. Bozeman Jr. of Engineering for their Axial Pump; Jane T. Malin of Engineering for her Global Qualitative Flow-Path Modeling for Local State Determination in Simulation and Analysis; William C. Schneider of Engineering for his Method and Apparatus for Coupling Space Vehicles; Richard J. Bozeman Jr. of Engineering for his Accelerometer Method and Apparatus for Integral Display and Control Functions; Joel M. Stoltzfus of the White Sands Test Facility for his Method and Apparatus for Production of Powders; G. Dickey Arndt of Engineering for his Particle Velocity Measuring System; Richard D. Juday of Engineering for his Apparatus and Method for Focusing a Light Beam in a Three-Dimensional Recording Medium by a Dynamic Holographic Device.

Also honored were Dena S. Haynes and George A. Salazar of Engineering for their Real-Time Reconfigurable Adaptive Speech Recognition Command and Control Apparatus and Method; Charles A. Verostko of Engineering for his Fiber-Optic Chemiluminescent Biosensors for Monitoring Aqueous Alcohols and Other Water Quality Parameters; Steven L. Koontz of Engineering for his Distributed Pore Chemistry in Porous Organic Polymers; Dennis R. Morrison of Space and Life Sciences for his Microcapsules and Methods for Making; Glenn F. Spaulding of Space and Life Sciences and David A. Wolf of Flight Crew Operations for their Cultured High-Fidelity Three-Dimensional Human Urogenital Tract Carcinomas and Process. ■

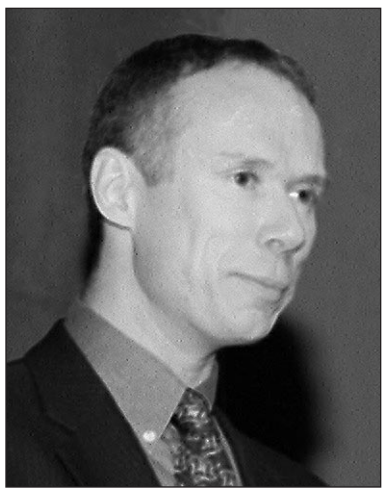
Safety & Total Health Day

Bad choices can last a lifetime – *if you live*

By Mary Peterson

He's an emergency room doctor. He's used to seeing trauma and injury – or should be. But one girl in particular made him cry.

She was young. She had her whole life before her when a tragic automobile accident changed everything. She was left a paraplegic, and her world closed in, proportionate to her diminished body. "What," asked the doctor, "is the most difficult thing?" Without hesitation, she said, "The wheelchair. I look at my twin sister, and I see myself. I see the things she can do that I cannot."



Robert Conn

The doctor was Dr. Robert Conn, one of Canada's most celebrated children's cardiovascular surgeons, and keynote speaker at JSC's Safety & Total Health Day event this year. His message: life should be happy and fun, but it is not without risk. How you manage that risk can make a difference, and bad choices can last a lifetime – if you live.

What are good choices? They can be as simple as buckling your seat belt, not drinking and driving, not taking drugs, not diving into unfamiliar waters, and wearing a crash helmet and other safety gear appropriate to your activity, just to name a few.

Conn told how he left medical practice six years ago to become a crusader for safer living. "I had always wanted to be a doctor, and part of my training was done in Atlanta with the organ harvest team. I never stopped to think where the hearts came from. They were donors – much like everyone in this room," he told the audience, "but, injured – brain damaged, and I thought, 'it didn't have to happen.' I came to the point I couldn't stomach taking hearts out of people who should not be dead." This was the genesis of what would become his very successful SmartRisk Foundation based in Toronto, Ontario, Canada, and dedicated to accident prevention.

But, how do you get people to buy into safety? "If you asked most people what they thought was the number one cause of death," Conn said, "they would likely respond 'cancer,' then, 'heart.' But the actual number one cause of death is injury. Young people, ages 1–20, are more likely to die of injury than from all other diseases combined." They are called accidents, "an unavoidable act of fate," the dictionary says. Conn agrees with neither, believing all accidents are predictable and preventable. "Mostly," he says, "they're the result of bad choices." For these reasons, he fervently believes that risk management should become a social issue, patterned much after the successes of the fitness and environmental movements.

A point made by Conn was that the media contributes to the public's frame of thinking. "For example," he said, "six young girls were in a car wreck, three of whom were decapitated, and the headlines read, 'Three Young People Die in Car Accident,' yet," he continued, "should three people die of meningitis or some other frightening disease, it would be a big story and would create public outcry." Why? Because people feel this is something out of their control. Prevention, cures, vaccines, therapies, etc., would suddenly be in big demand. Accidents, on the other hand, happen to "other people." Even the terms we use remove personal responsibility: "the car went out of control," or "the car flipped over."

Much of this kind of thinking is changing, however – at least among many Canadian young people. SmartRisk created a traveling roadshow that features some 7,000 pounds of high-tech audio/video equipment and addresses 400 young people at a time. It shows the painful difference between young people having a good time as contrasted with kids in wheelchairs and spinal cord units. The show is not designed to scare or preach, but, rather, to elicit a strong emotional reaction. It does. Most important, it teaches young people that they are in control and they make their choices.

SmartRisk has also entered into television communications, having made some gripping public service announcements, two of which were shown to the audience. One particularly poignant example was inspired by the alarming rise in boating deaths among young men, 19-35, and occurring less than 100 feet from shore. The usual cause was not wearing a life jacket. How could they reach this age group with their message? A study revealed that 80 percent had children. This could be the answer.

Lights dimmed, and the opening shot was a close-up of two young girls, about 4 and 5, wearing lifejackets themselves and sitting in a small fishing boat. The camera pulled out to discover they were alone in the vessel, rocking, rocking, silently and alone. A longer camera shot revealed an empty life jacket floating in the water. The voice over said, "They didn't really need you anyway."

The response, according to Conn, has been incredible. Most, he said, were worried about what would happen to the kids. Who would rescue them?

In addition to recognizing the choices of smart risk, Conn urges safety training. "Most people who get hurt," he says, "are not properly trained." Being trained in first aid can reduce injury risk by 30 percent. If you are trained, you know accidents don't just happen, Conn maintains.

Interestingly, when a famous celebrity dies, much is said as to what should have been done to prevent it. Conn cited actor John Candy, dead too young of a heart attack. "And, Diana, Princess of Wales. We read much about the paparazzi, the speed, and the alcohol, but not about the choice that Diana made that night," he said. "She was not wearing a seat belt. When the crash stopped the car, the momentum of her own body could not be stopped. It kept going, and because she did not have a seat belt, all her internal organs were damaged. You will remember the only survivor was the man in the front seat wearing a seat belt. Much was made of the speed and the alcohol – but we don't talk about safety." ■